



AHELP for CIAO 3.4

# split

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## Synopsis

Creates multiple drawing areas and/or arranges their locations.

## Syntax

```
chips> SPLIT <n>
chips> SPLIT <nx> <ny>
chips> SPLIT COLS <nc1> <nc2> ... <ncN>

where <n>, <nx>, <ny>, <ncN> must be integers greater than zero.
```

## Description

The commands create plots as follows:

- **SPLIT <n>** – a single column containing <n> rows of drawing areas.
- **SPLIT <nx> <ny>** – <nx> columns, each with <ny> rows of drawing areas. The command **SPLIT 1 <ny>** is equivalent to **SPLIT <n>**.
- **SPLIT COLS <nc1> <nc2> ... <ncN>** – a column for each item in the list, with each value indicating how many rows to place in that column.

Drawing areas are numbered sequentially from the upper left corner, top to bottom and left to right.

To arrange drawing area locations:

```
chips> SPLIT MAJ <coor>
chips> SPLIT GAP [<coor>] <separation>
chips> SPLIT GAP <nc> <separation>
chips> SPLIT LOCATION <x1> <x2> <y1> <y2>
```

where:

```
Argument: <coor>
Description: axis on which the split or gap is created
```

```
Options: X, Y
Default: both X and Y
```

```
Argument: <nc>
Description: column or row number, depending on the current SPLIT MAJ <coor> setting
Options: integer numbers
```

```
Argument: <separation>
Description: gap spacing
Options: real numbers
Default: 0
```

SPLIT MAJ <coor> controls whether rows or columns are used when arranging drawing areas. The default setting is SPLIT MAJ X. When SPLIT MAJ Y has been set, the basic SPLIT commands operate using rows instead of columns. Note that this command affects the currently existing plot, as shown in the examples.

SPLIT GAP [<coor>] <separation> changes the gap spacing between drawing areas to the amount specified. If no <coor> is given, both row (Y axis) and column (X axis) gaps are changed. The coordinate system runs from 0 to 1, so a <separation> <= 0.1, is typically appropriate.

When SPLIT MAJ X is set (this is the default), the command SPLIT GAP <nc> <separation> changes the row spacing within column <nc>. If SPLIT MAJ Y is set, however, the command SPLIT GAP <nc> <separation> changes the column spacing within row <nc>.

The command SPLIT LOCATION <x1> <x2> <y1> <y2> is analogous to the LOCATION command for drawing areas.

CIAO allows some plot attributes to be changed using the ChIPS state object and resource file. See "ahelp chips" for further details.

## Example 1

```
chips> SPLIT 3
```

Three drawing area are created, arranged in a single column.

## Example 2

```
chips> SPLIT 3 2
```

Three columns are created, each with 2 rows of drawing areas. The following command is equivalent:

```
chips> SPLIT COLS 2 2 2
```

## Example 3

```
chips> SPLIT COLS 1 2 3
```

This command creates 3 columns. The first column contains one row of drawing areas, the second contains two rows, and the third column contains three rows.

## Example 4

```
chips> SPLIT COLS 4 1 2 3
chips> SPLIT MAJ Y
```

The first command creates four columns. The first column contains four rows of drawing areas, the second contains one, the third contains two, and the fourth contains three. The command SPLIT MAJ Y reverses the columns to rows, so that there are now four rows. The first row contains four columns, the second row contains one column, the third row contains 2 columns, and the fourth row contains three columns.

## Example 5

```
chips> SPLIT 3
chips> SPLIT GAP 0.15
```

Three drawing area rows are created, arranged in one column. The SPLIT GAP 0.15 command changes the gap spacing between the rows to 0.15. The following command is equivalent:

```
chips> SPLIT GAP Y 0.15
```

## Example 6

```
chips> SPLIT 3 2
chips> SPLIT GAP Y 0.12
chips> SPLIT GAP X 0.10
chips> SPLIT GAP 0.08
```

First, three columns of drawing areas are created, each containing 2 rows. The gap spacing between the rows is changed to 0.12, and the spacing between the columns is changed to 0.10. The final command changes all gap spacings to 0.08.

## Example 7

```
chips> SPLIT MAJ X
chips> SPLIT GAP 2 0.19
```

The row spacing in column 2 only is changed to 0.19.

## Example 8

```
chips> SPLIT 3 2
chips> SPLIT GAP 0.03
chips> SPLIT MAJ Y
chips> SPLIT GAP 1 0.2
```

First, three columns of drawing areas are created, each containing 2 rows. All gap spacings are then set to 0.03. The SPLIT MAJ Y command reverses the column and row precedences; this changes the drawing area to two columns with three rows. The final command changes the column spacing within row one to 0.2.

## Bugs

See the [bugs page for ChIPS](#) on the CIAO website for an up-to-date listing of known bugs.

## See Also

*chips*

[axes](#), [drawarea](#), [errs](#), [font](#), [grids](#), [label](#), [levels](#), [limits](#), [line](#), [linear](#), [location](#), [log](#), [relativesize](#), [symbol](#), [ticks](#),  
[tickvals](#), [title](#), [xlabel](#), [ylabel](#), [zlabel](#)

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URL:  
<http://cxc.harvard.edu/ciao3.4/split.html>  
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